

CLAIMS

What is claimed is:

- 1 1. A content transformation method operated in a client-server communication system, the method comprising steps of:
 - 3 receiving a content request by a server from a client;
 - 4 performing a first stage content transformation to generate a first stage data layout based upon said content request;
 - 6 performing a intermediate stage content transformation using said first stage data layout to generate a intermediate data layout; and
 - 8 performing a final stage content transformation using said intermediate data layout to generate a presentation format based on a device used by said client.
- 1 2. The method as recited in claim 1, wherein the step of performing said a first stage content transformation comprises the step of retrieving data from a database.
- 1 3. The method as recited in claim 2, wherein the step of performing a first stage content transformation further comprises the step of defining a set of first stage rules.
- 1 4. The method as recited in claim 3, wherein the step of performing a first stage content transformation further comprises step of generating said first stage data layout by transforming said data using said first stage rules.
- 1 5. The method as recited in claim 2, the step of performing an intermediate stage content transformation comprises step of performing one or more sub-stages to generate said intermediate stage data layout.
- 1 6. The method as recited in claim 5, wherein the step of performing one or more sub-stages comprises a step of performing a browser-type stage using a set of browser-type rules.
- 1 7. The method as recited in claim 5, wherein the step of performing one or more sub-stages comprises a step of performing an internationalization stage using a set of internationalization rules.

1 8. The method as recited in claim 5, wherein the step of performing one or
2 more sub-stages comprises a step of performing a user profile stage using
3 a set of user profile rules.

1 9. The method as recited in claim 5, wherein the step of performing one or
2 more sub-stages comprises a step of performing an optimization stage
3 using a set of optimization rules.

1 10. The method as recited in claim 1, wherein the step of performing a final
2 stage content transformation comprises a step of defining a set of final
3 stage rules.

1 11. The method as recited in claim 10, wherein the step of defining a set of
2 final stage rules comprises a step of using said content request to define
3 the final stage rules.

1 12. The method as recited in claim 1, wherein the content transformation is
2 XSLT based content transformation using XSLT engine.

1 13. A server in a client-server communication system, the server comprising;
2 a content transformation operating program wherein the operating
3 program comprising the steps of:
4 receiving a content request by a server from a client;
5 performing a first stage content transformation to generate a first
6 stage data layout based upon said content request;
7 performing a intermediate stage content transformation using
8 said first stage data layout to generate a intermediate data
9 layout; and
10 performing a final stage content transformation using said
11 intermediate data layout to generate a presentation format
12 based on a device used by said client.

1 14. The server according to claim 13, wherein the step of performing a first
2 stage content transformation, further comprises the step of retrieving data
3 from a database.

- 1 15. The server according to claim 14, wherein the step of performing a first
- 2 stage content transformation, further comprises the step of defining a set
- 3 of first stage rules.
- 1 16. The server according to claim 15, wherein the step of performing a first
- 2 stage content transformation further comprises step of generating said first
- 3 stage data layout by transforming said data using said first stage rules.
- 1 17. The server according to claim 13, the step of performing an intermediate
- 2 stage content transformation comprises step of performing one or more
- 3 sub-stages to generate said intermediate stage data layout.
- 1 18. The server according to claim 17, wherein the step of performing one or
- 2 more sub-stages comprises a step of performing a browser-type stage
- 3 using a set of browser-type rules.
- 1 19. The server according to claim 17, wherein the step of performing one or
- 2 more sub-stages comprises a step of performing an internationalization
- 3 stage using a set of internationalization rules.
- 1 20. The server according to claim 17, wherein the step of performing one or
- 2 more sub-stages comprises a step of performing a user profile stage using
- 3 a set of user profile rules.
- 1 21. The server according to claim 17, wherein the step of performing one or
- 2 more sub-stages comprises a step of performing an optimization stage
- 3 using a set of optimization rules.
- 1 22. The server according to claim 13, wherein the step of performing a final
- 2 stage content transformation comprises a step of defining a set of final
- 3 stage rules.
- 1 23. The server according to claim 22, wherein the step of defining a set of final
- 2 stage rules comprises a step of using said content request to define the
- 3 final stage rules.